

US EPA ARCHIVE DOCUMENT



1540 Eisenhower Place
Ann Arbor, MI 48108

734.971.7080 PHONE
734.971.9022 FAX

www.TRCsolutions.com

April 15, 2013

Mr. Joseph Kelly
Project Manager
USEPA, Region 5
77 West Jackson Boulevard
LU-9J
Chicago, IL 60604-3590

**Subject: RCRA 3008(h) Administrative Order on Consent (RCRA-05-2010-0012) –
Tecumseh Products Company
First Quarter 2013 Progress Report – MID 005-049-440**

Dear Mr. Kelly:

Pursuant to Section VI of the above referenced Administrative Order on Consent (Consent Order) effective March 29, 2010, TRC Environmental Corporation (TRC), on behalf of the Respondent Tecumseh Products Company (TPC), submits this First Quarter 2013 Progress Report. This report describes activities related to the Consent Order completed by TPC during the first quarter 2013 and planned for completion in the near future. The organization of this document includes, as major headings, the items required under Sections V through VIII of the Consent Order.

V. Project Manager

- The TPC Project Manager is Graham Crockford of TRC.
- The USEPA Project Manager is Joseph Kelly.

VI. Work to be Performed – Remedial Investigation Report and Environmental Indicators Reports

1. A description of activities related to the completion of the Remedial Investigation (RI) Report and the Environmental Indicator (EI) Reports:
 - **Investigation Activities**
 - **Characterize Releases at or from the Facility** – The findings of source area investigation activities completed through August 2012 are documented in the September 2012 Remedial Investigation and Groundwater Environmental Indicator Report (2012 RI/EI

Mr. Joseph Kelly
USEPA, Region 5
April 15, 2013
Page 2

Report). A Supplemental Groundwater Investigation Workplan was submitted and implemented during the first quarter 2013. A report documenting the findings of these investigation activities will be prepared during the second quarter 2013.

- **Define Appropriate Screening Criteria** – Screening criteria are described in detail in the 2012 RI/EI Report. The 2012 RI/EI Report also includes calculation sheets for site specific screening criteria. Screening criteria include:
 - § Generic Michigan Department of Environmental Quality (MDEQ) Part 201 Criteria;
 - § Calculated screening levels for the volatilization to indoor air migration pathway;
 - § MDEQ Rule 57 Surface Water Quality Values; and
 - § A site specific groundwater contact criterion for trichloroethene (TCE) which reflects the 2011 revisions to TCE toxicity data.
- Currently, groundwater data indicate that groundwater in a well upgradient of the River Raisin (MW-31) has concentrations above Part 201 generic groundwater/surface water interface (GSI) criteria. A request for mixing zone-based GSI criteria was submitted to MDEQ for review and determination in June 2012.
- **Define Any Unacceptable Risks to Human Health** – As described in the 2011 Current Human Exposures Under Control Environmental Indicator Report (2011 EI Report), current human exposures to affected media are under control. In response to USEPA comments, the following supplemental data/documentation have been or will be provided to USEPA to support this determination:
 - § Indoor air/crawlspac sampling data from the residential properties east of the site collected between October 2011 and November 2012. USEPA was provided with copies of letter reports sent to property owners as data became available;
 - § Table summaries related to the conceptual site model (included in the Fourth Quarter 2012 Quarterly Progress Report); and
 - § Soil gas sample data collected during four consecutive soil gas sample events following SVE system installation (through second quarter 2013). Data are submitted to USEPA as they become available.
- **Define Any Unacceptable Risks to the Environment** – The potential for unacceptable risk to the environment related to the discharge of affected groundwater to nearby surface water and wetlands was evaluated in the 2012 RI/EI Report. This evaluation includes the use of site specific mixing zone-based GSI criteria.

Mr. Joseph Kelly
USEPA, Region 5
April 15, 2013
Page 3

- **Determine the Stability of Contaminated Groundwater** – An evaluation of the stability of contaminated groundwater was included in the 2012 RI/EI Report. As additional groundwater data become available, groundwater stability will be re-evaluated as appropriate.
- **Response and Mitigation Measures** – Response and mitigation measures conducted to date are documented in the 2011 EI Report, the 2012 RI/EI Report and the February 2013 Full-Scale Soil Vapor Extraction System Construction Documentation Report for P-Building. These measures include:
 - A local groundwater use ordinance;
 - The decommissioning of private wells in the vicinity of affected groundwater;
 - A Declaration of Restrictive Covenant and License Agreement Regarding Environmental Work for the site;
 - Mitigation of on-site indoor air in areas that are occupied or are expected to be occupied in the future, including:
 - § Installation of a sub-slab depressurization/ventilation (SSDV) system in S-Building (the office area for the site manager); and
 - § Installation of a soil vapor extraction (SVE) system in P-Building;
 - Monitoring and mitigation of off-site indoor air including:
 - § Installation of a SSDV system at one residential property east of the site;
 - § Completion of crawlspace sampling activities at four residential properties east of the site;
 - § Installation of a permeable reactive barrier (PRB) downgradient of the southern source area, to address the potential off-site vapor intrusion pathway, by treating shallow CVOC-affected groundwater before the groundwater migrates off-site.
- **Reporting and Summary of Work Complete**
 - **Environmental Indicators Report: Current Human Exposures under Control** – TRC submitted the Current Human Exposures Under Control Environmental Indicators Report (2011 EI Report) to USEPA on September 29, 2011. USEPA provided TPC with comments regarding the 2011 EI Report on December 5, 2011. TPC responded to USEPA comments on December 19, 2011. On December 28, 2011, USEPA proposed an extension for USEPA to complete the CA-725 Form until December 12, 2012, so that confirmation indoor air/crawlspace sampling data from the residential properties east of the site (610 Mohawk, 704 Mohawk, 502 Mohawk, 505 South Maumee Street and 507 South

Mr. Joseph Kelly
USEPA, Region 5
April 15, 2013
Page 4

Maumee Street) could be evaluated by USEPA. This work was completed as intended during the fourth quarter 2012. However during an October 29-30, 2012 project meeting, USEPA provided TPC with additional action items to support completion of the CA-725 form. Action items are documented in a Technical Memorandum dated December 5, 2012 and Revised December 19, 2012. With respect to current human exposures under control, those action items include:

- § Table summaries related to the conceptual site model (included in the Fourth Quarter 2012 Quarterly Progress Report); and
- § Four consecutive soil gas sample events at soil gas monitoring locations north and west of the site after SVE system installation (through second quarter 2013), in order to document to effectiveness of the SVE system.

On March 6, 2013, USEPA extended the date for the Current Human Exposures Demonstration to September 30, 2013 to allow TPC to complete those action items. Consistent with this extension, TPC will provide USEPA with a Supplement to the Current Human Exposures EI Report to support USEPA completion of the CA-725 Form no later than September 30, 2013.

- **Environmental Indicators Report: Groundwater Stabilized** – TRC submitted the 2012 RI/EI Report to USEPA on September 28, 2012. During the October 29-30, 2012 project meeting, USEPA provided TPC with additional action items to support completion of the CA-750 Form. With respect to groundwater stability, those action items include:

- § Additional sample events at monitoring wells where VOC concentration data exhibit relatively high standard deviation.
- § Preparation of a workplan to address USEPA comments regarding groundwater stability and remedial investigation activities. The Supplemental Groundwater Investigation Workplan for the Former Tecumseh Products Company Site in Tecumseh, Michigan was submitted and implemented during the first quarter 2013.
- § Installation of additional monitoring wells and subsequent monitoring at those locations in accordance with the Supplemental Groundwater Investigation Workplan.

On March 6, 2013, USEPA extended the date for the Remedial Investigation and Groundwater Environmental Indicator Determination to July 31, 2015. This extension will allow TPC to complete eight quarterly sample events at new monitoring locations prior to the submittal of a Supplement to the 2012 RI/EI Report which will support USEPA completion of the CA-750 Form.

Mr. Joseph Kelly
USEPA, Region 5
April 15, 2013
Page 5

- **Remedial Investigation Report** – TRC submitted the Remedial Investigation Report with the 2012 RI/EI Report to USEPA on September 28, 2012. As described above, USEPA extended the date for the Remedial Investigation and Groundwater Environmental Indicator Determination to July 31, 2015. TPC will provide USEPA with a Supplement to the 2012 RI/EI Report in order to support USEPA completion of the CA-750 Form, following completion of the additional investigation and monitoring activities described in the Supplemental Groundwater Investigation Workplan.

2. A Summary of Activities during the Reporting Period

- January 2013 – Regular operation and maintenance of the P-Building SVE system was completed including collection of exhaust samples for laboratory analysis and carbon change out.
- January 2013 – A Supplemental Remedial Investigation Workplan was prepared and submitted.
- January 2013 – A tabular summary of the conceptual site model was prepared and submitted.
- January 2013 – Technical memoranda summarizing fourth quarter 2012 groundwater and soil gas monitoring activities were prepared and submitted.
- January 2013 – Letter reports documenting fourth quarter 2012 residential crawl space and indoor air sample results were prepared and submitted the property owners.
- January 2013 – Gas concentrations were measured at methane vent locations.
- January 2013 – The 2013 annually adjusted cost estimate was prepared and submitted.
- February 2013 – Operation and maintenance of the P-Building SVE system was completed including carbon change out, completion of piping repairs at extraction point SVE-06, installation of protective bollards around extraction points SVE-06 and SVE-07, and installation of an electrical conduit between the main power supply and the SVE skid.
- February 2013 – The Full-Scale Soil Vapor Extraction System Construction Documentation Report for P-Building was prepared and submitted.
- February 2013 – The Revised Supplemental Remedial Investigation Workplan, Revision to the Quarterly Compliance Monitoring Program, and Response to USEPA Comments was prepared and submitted.
- February 2013 – Gas concentrations were measured at methane vent locations.
- February 2013 – The City of Tecumseh issued a No Entry Order for the facility building, restricting access to interior treatment systems and monitoring points.

Mr. Joseph Kelly
USEPA, Region 5
April 15, 2013
Page 6

- n March 2013 – USEPA extended project deadlines, specifically the date for the Current Human Exposures Environmental Indicator demonstration was extended until September 30, 2013; the date for the Remedial Investigation and Groundwater Environmental Indicator Demonstration Report was extended until July 31, 2015; and the date for the Final Corrective Measures Proposal was extended until January 31, 2016.
 - n March 2013 – Regular operation and maintenance of the P-Building SVE system was completed including carbon change out.
 - n March 2013 – The first quarter groundwater sample event was conducted, including collection of a groundwater sample at three monitoring locations.
 - n March 2013 – Groundwater samples were collected at PRB monitoring locations.
 - n March 2013 – Gas concentrations were measured at methane vent locations.
 - n March 2013 – The first quarter 2013 off-site soil gas sample event was completed.
 - n March 2013 – The first quarter SSDV performance evaluation at the residential property located at 704 Mohawk Street was completed.
 - n March 2013 – Soil boring and well installation activities, as described in the revised Supplemental Remedial Investigation Workplan, were completed.
 - n March 2013 – 2013 Financial Assurance documents were prepared and submitted.
3. A Summary of Contacts with Representatives of Local Community, Public Interest Groups, or State Government during the Reporting Period
- n In January 2013, TRC submitted letter reports to property owners documenting fourth quarter 2012 crawlspace sampling activities.
 - n In January 2013, TRC submitted a letter report to the owner of a residential property east of the site documenting the regular quarterly SSDV system inspection.
 - n At the request of one property owner, TRC provided that owner with a copy of the Fourth Quarter 2012 Progress Report.
 - n TRC communicated with the Tecumseh District Library personnel in order to update the public repository at the Tecumseh District Library in February 2013.
 - n In March 2013, TRC communicated with the owner of a residential property east of the site regarding the regular quarterly SSDV system inspection.
 - n In February and March 2013, TRC communicated with MDEQ regarding the status of the Application for Mixing Zone-Based GSI Criteria.

Mr. Joseph Kelly
USEPA, Region 5
April 15, 2013
Page 7

- n In March 2013, TRC communicated with the City of Tecumseh regarding renewal of the existing right-of-way permit.
- n In February and March 2013, TPC communicated with the City of Tecumseh regarding the access to the building as described below.
- n In March 2013, Jason Smith of TPC was contacted by the Tecumseh Herald regarding remedial investigation activities.

4. A Summary of Problems and Potential Problems Encountered During the Reporting Period

- n During the first quarter 2013, Tecumseh Food Machinery & Engineering, LLC began demolition activities at the facility without a permit. The City of Tecumseh responded by issuing a Stop Work Order and a No Entry Order. Access to the building has been restricted indefinitely.

5. Action Taken to Rectify Problems Identified Above

- n TPC notified the City of Tecumseh of where ongoing monitoring and mitigation activities are conducted in the building which had been/would be restricted by the No Entry Order.
- n TPC began discussions with the City of Tecumseh regarding possible mechanisms for temporary access to the building to conduct ongoing environmental work.
- n Given that access to the building had been restricted, TPC notified USEPA of a possible force majeure event.

6. Changes in Personnel during Reporting Period

- n No TPC/TRC project personnel have changed.

7. Projected Work for the Next Reporting Period

- n Complete an initial groundwater sample event at new monitoring locations;
- n Meet with USEPA on-site;
- n Continue routine SVE system operation and maintenance, including completion of carbon change as needed;
- n Collect second quarter 2013 PRB groundwater samples;
- n Conduct and evaluate the second quarter 2013 groundwater sampling event;
- n Evaluate and submit first quarter 2013 soil gas sample data;
- n Document findings of the Supplemental Remedial Investigation and initial groundwater sample event;

Mr. Joseph Kelly
USEPA, Region 5
April 15, 2013
Page 8

- Prepare a workplan for a pilot study to evaluate southern source area groundwater treatment options;
- Conduct a quarterly SSDV system performance evaluation at S-Building;
- Conduct a quarterly SSDV system performance evaluation at the residential property located at 704 Mohawk;
- Complete and evaluate the second quarter 2013 off-site soil gas sample event; and
- Collect gas composition readings at vents installed along the length of the PRB.

VI. Work to be Performed – Final Corrective Measures Proposal

Preparation of the Final Corrective Measures Proposal will be initiated following completion of the Supplement to the Current Human Exposures EI Report and the Supplement to the RI and Groundwater EI Report.

VI. Work to be Performed – Final Corrective Measures Implementation

Work related to the Final Corrective Measures Implementation will be initiated following USEPA's Final Decision.

VI. Work to be Performed – Establish Public Repository of Information

TPC established a public repository in the City Clerk's office at City Hall in August 2010. To address USEPA comments, the public repository was relocated to the Tecumseh District Library in November 2011. A notice sheet has been posted on the bulletin board at the Tecumseh District Library which lists and briefly describes the documents included in the public repository. TPC updates the public repository as appropriate.

VII. Access

No new access agreements were obtained during the first quarter 2013.

VIII. Cost Estimates and Assurances of Financial Responsibility

In accordance with the Consent Order, TPC submitted an annually updated cost estimate on January 30, 2013 and updated Financial Assurance documents on March 30, 2013.

Mr. Joseph Kelly
USEPA, Region 5
April 15, 2013
Page 9

If you have any questions regarding this progress report, or the attachments, please contact me at (734) 585-7813, or gcockford@trcsolutions.com.

Sincerely,

TRC Environmental Corporation



Graham Crockford, C.P.G.
Project Manager

cc: Susan Perdomo, USEPA
Chris DeWetter, Tecumseh Products Company
Jason Smith, Tecumseh Products Company
Douglas McClure, Conlin, McKenney & Philbrick, PC
Stacy Metz, TRC Environmental
Dave Roberts, Tecumseh Food Manufacturing & Engineering, LLC
Tecumseh District Library – Public Repository
Mary Speer, Resident
Central Files